Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Revision of the Commission's Rules	)	
To Ensure Compatibility with	)	CC Docket No. 94-102
Enhanced 911 Emergency Calling Systems	)	
	)	
City of Richardson, Texas,	)	DA 01-1623
Request for Clarification or Declaratory	)	
Ruling Concerning Public Safety	)	
Answering Point Requests for	)	
Phase II Enhanced 911	)	
	)	

SPRINT PCS COMMENTS

Sprint Spectrum L.P., d/b/a Sprint PCS ("Sprint PCS"), hereby responds to the invitation to submit comment on "what objective criteria a PSAP could be required to meet to demonstrate at the time it makes a request that it has taken sufficient steps to assure that it will be able to receive and utilize the E911 data prior to the delivery of service by the carrier."[1]

Sprint PCS is sympathetic to the desire of Public Safety officials to receive E911 services at the earliest opportunity. As Sprint PCS noted in its initial comments, however, modifying the current rule to permit a PSAP to request service before taking the necessary steps to meet its obligations will not speed deployment of Phase II services.

---

[1] *See Public Notice,* "Wireless Telecommunications Bureau Seeks Further Comment on the Commission's Rules Concerning Public Safety Answering Point Requests for Phase II Enhanced 911," CC Docket No. 94-102, DA 01-1623 (July 10, 2001). *See also* City of Richardson, Petition for Clarification and/or Declaratory Ruling, CC Docket No. 94-102 (April 5, 2001)("Richardson Petition").

Such a rule modification may increase the number of Phase II requests, but it will likely result in fewer Phase II conversions because scarce resources would be diverted from deployment efforts where PSAPs are ready for Phase II services.

Sprint PCS nonetheless supports the Bureau's suggestion that enumerating objective criteria would help clarify the respective obligations of PSAPs and wireless carriers and in the process, potentially facilitate the deployment of Phase II service. To that end, Sprint PCS recommends that a PSAP be required to make the following certifications, at a minimum, to ensure that it will be ready to receive and utilize Phase II services:

- A certification that the PSAP's ALI database supports the E2 interface contained in J-STD-036 and the delivery of a confidence factor;
- A certification that the PSAP's CPE is capable of processing latitude and longitude when delivered in conformance with J-STD-036; and
- A certification that the PSAP is prepared to provide the necessary data and administrative support for Phase II deployment.

I. A PHASE II REQUEST SHOULD CERTIFY THAT THE PSAP'S ALI DATABASE SUPPORTS THE E2 INTERFACE CONTAINED IN J-STD-036 AND DELIVERY OF A CONFIDENCE FACTOR

Industry and Public Safety have worked cooperatively to develop a national standard, J-STD-036, for the delivery of Phase II services.[2] This standard provides basic guidelines for the way in which information is to be exchanged and the basic functions for each portion of the 911 network. Wireless carriers and their vendors have relied upon this standard to formulate their plans for Phase II deployment. One of the guidelines

[2] *See* TR-45, Enhanced Wireless 9-1-1 Phase 2, J-STD-036 (July 11, 2000)("J-STD-036").

enumerated in J-STD-036 is the implementation of a capability that permits a PSAP to "pull" latitude and longitude location data from wireless Mobile Positioning Centers (frequently referred to as an "E2 Interface").[3]

This pull functionality serves two important purposes. First, a pull interface permits the PSAP to track a 911 call even if the caller is moving. Second, and perhaps more importantly, the pull interface permits the PSAP to receive location information when the calculation cannot be completed within the standard call set up time. Given the complexity associated with location calculation, it appears likely that delivery of such data within the limited call set up window will be problematic.

PSAPs are responsible for maintaining and upgrading their ALI database.[4] Because an E2 Interface will be a critical gating factor for delivery of Phase II services, it is appropriate that the PSAP certify that its ALI database conforms to the J-STD-036 pull interface.

Sprint PCS does not mean to suggest that the absence of an E2 Interface should be an arbitrary barrier to Phase II deployment. If the PSAP's ALI database provider can provide a similar function through a different proprietary interface, Sprint PCS would attempt to accommodate the PSAP request. In this circumstance, however, the PSAP would need to provide the technical specifications for the new interface. In addition, such

---

[3] *See* J-STD-036, at 3-3, 3-5 and Figure 3-1. A pull interface is primarily discussed in the context of NCAS solutions. It is Sprint PCS' understanding that no LEC supports a CAS solution, whereby Phase II location data would be transmitted (or "pushed") directly to the PSAP *via* the selective router to PSAP trunks.

[4] *See, e.g.,* Letter from Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, to Marlys R. Davis, E911 Program Manager, King County E-911 Program Office (May 7, 2001).

requests should be removed from the six-month implementation deadline in acknowledgement of the additional work that will need to be performed.

In addition to the E2 Interface, it is also important that the ALI database be capable of providing a confidence factor to the PSAP.[5] The confidence factor will permit a PSAP to determine whether it is responding to a highly accurate GPS-based location or is receiving only a default location based on cell and sector. Without the confidence factor, the PSAP will not know if it is dispatching services to a specific location or initiating a two-mile search ring. This functionality is of particular importance to subscribers of Sprint PCS and other carriers implementing handset-based Phase II solutions.

II. A PHASE II REQUEST SHOULD CERTIFY THAT PSAP CPE IS CAPABLE OF PROCESSING LATITUDE AND LONGITUDE WHEN DELIVERED IN CONFORMANCE WITH J-STD-036

Phase II location data will generally be delivered through a digit stream containing latitude and longitude, and this data will often entail more than 40 digits. PSAP CPE equipment must be upgraded to accept this data stream and convert it to a usable format. Sprint PCS does not believe a PSAP must have "state-of-the-art mapping capability," but the PSAP must have the ability to convert latitude and longitude into an identifiable location. The CPE could perform mapping, less sophisticated plotting, or mere conversion to approximate street addresses.[6] What is critical is that the PSAP is "capable of . . . utiliz-

---

[5] *See* J-STD-036 at 8-30, § 2.2.2.9 ("In addition, confidence level (including uncertainty) of the geodetic position is required per agreement with Public Safety.").

[6] Obviously, the less sophisticated the CPE equipment installed by the PSAP is, the less the PSAP will be able to take advantage of the high accuracy standards mandated by the FCC's rules and provided by wireless carriers.

ing the data elements" for purposes of responding to wireless 911 calls.[7] If the PSAP's current CPE is not capable of performing this conversion function, the PSAP should at a minimum certify that it has entered into a binding contractual relationship with a vendor and that delivery of such equipment is anticipated prior to the wireless carrier's service delivery date. In addition, the PSAP should keep the wireless carrier informed if problems develop with the delivery of such equipment so that the wireless carrier can respond appropriately.

III. THE PSAP SHOULD CERTIFY THAT IT IS PREPARED TO PROVIDE THE NECESSARY DATA AND ADMINISTRATIVE SUPPORT FOR PHASE II DEPLOYMENT

In addition to the more complex hardware and software readiness issues discussed above, it is also important that PSAPs understand that more mundane administrative responsibilities will also accompany their request. Wireless carriers must be provided boundary maps, contact information, routing information, testing schedules and other data in order to implement enhanced 911 services. Much of this information can only be obtained from the PSAP. It is important that a PSAP making a request understand that wireless carriers will be seeking this information and can only provide services when it is supplied.

IV. CONCLUSION

Sprint PCS is investing tremendous resources toward the development and deployment of Phase II services and is as eager as public safety to complete this implementation process. Realistically, however, roll out of Phase II services is going to be a time consuming task with many more unanticipated problems. Changing the existing rules

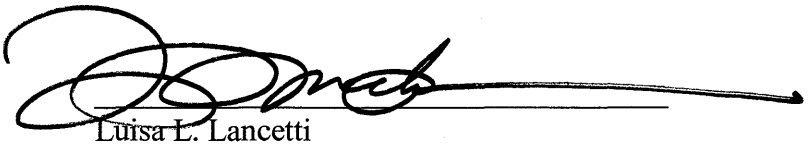
---

[7] 47 C.F.R. § 20.18(j).

governing PSAP requests is not likely to speed deployment. If, however, the Commission believes further modifications of the rules are required, Sprint PCS suggests that PSAP requests contain, at a minimum, the certifications enumerated above.

Respectfully submitted,

SPRINT SPECTRUM L.P. d/b/a SPRINT PCS



Luisa L. Lancetti
Vice President, Regulatory Affairs
Sprint PCS
401 9th Street, N.W., Suite 400
Washington, D.C. 20004
202-585-1923

Charles W. McKee
General Attorney
Sprint PCS
6160 Sprint Parkway, Building 9
Overland Park, KS 66251
913-762-7720

Its Attorneys

July 25, 2001

CERTIFICATE OF SERVICE

I, Jo-Ann Monroe, do hereby certify that on this 25th day of July 2001, copies of the foregoing Comments of Sprint Spectrum L.P., d/b/a Sprint PCS were served by U.S. first-class mail to the following:

International Transcription Services
445 12th Street, S.W.
Room CY-B402
Washington, D.C. 20554

Jason C. Marshall
Nichols, Jackson, Dillard, Hager & Smith
1800 Lincoln Plaza
500 North Akard
Dallas, TX 75201

Jo-Ann Monroe